

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

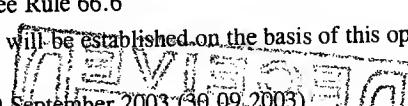
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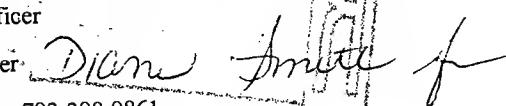
**PCT**

WRITTEN OPINION

(PCT Rule 66)

		Date of Mailing (day/month/year)	<b>17 JUN 2003</b>
Applicant's or agent's file reference  099997-195-P		REPLY DUE	within 1 months/days from the above date of mailing
International application No.  PCT/US02/17518	International filing date (day/month/year)  31 May 2002 (31.05.2002)	Priority date (day/month/year)  31 May 2001 (31.05.2001)	
International Patent Classification (IPC) or both national classification and IPC  IPC(7): F04B 39/10, 9/02 and US Cl.: 417/534, 903			
Applicant  APPROPRIATE TECHNOLOGIES FOR ENTERPRISE CREATION			

<ol style="list-style-type: none"> <li>1. This written opinion is the <u>first</u> (first, etc.) drawn by this International Preliminary Examining Authority.</li> <li>2. This opinion contains indications relating to the following items:           <ul style="list-style-type: none"> <li>I <input checked="" type="checkbox"/> Basis of the opinion</li> <li>II <input type="checkbox"/> Priority</li> <li>III <input type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</li> <li>IV <input type="checkbox"/> Lack of unity of invention</li> <li>V <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2 (a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</li> <li>VI <input type="checkbox"/> Certain documents cited</li> <li>VII <input type="checkbox"/> Certain defects in the international application</li> <li>VIII <input type="checkbox"/> Certain observations on the international application</li> </ul> </li> <li>3. The applicant is hereby invited to reply to this opinion.           <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">When?</td> <td>See the time limit indicated above. The applicant may, before the expiration of that time limit, request this Authority to grant an extension. See rule 66.2(d).</td> </tr> <tr> <td>How?</td> <td>By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.</td> </tr> <tr> <td>Also</td> <td>For an additional opportunity to submit amendments, see Rule 66.4. For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 bis. For an informal communication with the examiner, see Rule 66.6</td> </tr> </table> </li> <li>If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.</li> <li>4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: <u>30 September 2003 (30.09.2003)</u></li> </ol>	When?	See the time limit indicated above. The applicant may, before the expiration of that time limit, request this Authority to grant an extension. See rule 66.2(d).	How?	By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.	Also	For an additional opportunity to submit amendments, see Rule 66.4. For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 bis. For an informal communication with the examiner, see Rule 66.6	
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Name and mailing address of the IPEA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703)305-3230	Authorized officer Cheryl J. Tyler  Telephone No. 703-308-0861
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## WRITTEN OPINION

International application No.

PCT/US02/17518

**I. Basis of the opinion**

## 1. With regard to the elements of the international application:\*

the international application as originally filed  
 the description:

pages 1-11 \_\_\_\_\_, as originally filed  
 pages NONE \_\_\_\_\_, filed with the demand  
 pages NONE \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

the claims:

pages 12 \_\_\_\_\_, as originally filed  
 pages NONE \_\_\_\_\_, as amended (together with any statement) under Article 19  
 pages NONE \_\_\_\_\_, filed with the demand  
 pages NONE \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

the drawings:

pages 1-24 \_\_\_\_\_, as originally filed  
 pages NONE \_\_\_\_\_, filed with the demand  
 pages NONE \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

the sequence listing part of the description:

pages NONE \_\_\_\_\_, as originally filed  
 pages NONE \_\_\_\_\_, filed with the demand  
 pages NONE \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

## 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).  
 the language of publication of the international application (under Rule 48.3(b)).  
 the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

## 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the written opinion was drawn on the basis of the sequence listing:

contained in the international application in printed form.  
 filed together with the international application in computer readable form.  
 furnished subsequently to this Authority in written form.  
 furnished subsequently to this Authority in computer readable form.  
 The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  
 The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4.  The amendments have resulted in the cancellation of:

the description, pages NONE \_\_\_\_\_  
 the claims, Nos. NONE \_\_\_\_\_  
 the drawings, sheets/fig NONE \_\_\_\_\_

5.  This opinion has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed."

**WRITTEN OPINION**International application No.  
PCT/US02/17518**V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. STATEMENT**

Novelty (N)	Claims <u>NONE</u>	YES
	Claims <u>1</u>	NO
Inventive Step (IS)	Claims <u>NONE</u>	YES
	Claims <u>1</u>	NO
Industrial Applicability (IA)	Claims <u>1</u>	YES
	Claims <u>NONE</u>	NO

**2. CITATIONS AND EXPLANATIONS**

Claim 1 lacks novelty under PCT Article 33(2) as being anticipated by Herbst (2,074,787). Herbst teaches a frame 102 having mounted thereon a surge chamber 5b and a cylinder 1b, wherein the cylinder contains a valve assembly 10b; a rocker mechanism 70b pivotally mounted on the frame 102 and operatively connected to a dual action piston 2b; wherein the piston is operatively positioned within the cylinder; and an outlet valve 42b.

Claim 1 lacks novelty under PCT Article 33(2) as being anticipated by Smith (4,173,431). Smith teaches a frame 95 having mounted thereon a surge chamber 48a and a cylinder 60a, 60b, wherein the cylinder contains a valve assembly 74a, 74b; a rocker mechanism 90 pivotally mounted on the frame 95 and operatively connected to a dual action piston 62a, 62b; wherein the piston is operatively positioned within the cylinder; and an outlet valve 76ab.

Claim 1 lacks novelty under PCT Article 33(2) as being anticipated by Bearss (5,118,265). Bearss teaches a frame 18 having mounted thereon a surge chamber 42 and a cylinder 12, wherein the cylinder contains a valve assembly 50a, 50b; a rocker mechanism 30 pivotally mounted on the frame 18 and operatively connected to a dual action piston 11; wherein the piston is operatively positioned within the cylinder; and an outlet valve 50c, 50d.

----- NEW CITATIONS -----

WRITTEN OPINION

International application No.  
PCT/US02/17518

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

**TIME LIMIT:**

The time limit set for response to a Written Opinion may not be extended. 37 CFR 1.484(d). Any response received after the expiration of the time limit set in the Written Opinion will not be considered in preparing the International Preliminary Examination Report.